

AFRI Stakeholder Input (Feb-May 2012)

The AFRI Program received input from academia, industry, professional societies, and through written comments, and public and webinar listening sessions.

- Stakeholders were appreciative of the mission of the AFRI Program to support research, education, and extension work by awarding grants that address key problems of national, regional, and multi-state importance in sustaining all components of agriculture.
- Stakeholders recognized that funding of the large CAP programs and longer-term research brings diverse communities of scientists together and that this focus has the potential to solve important problems.
- However, stakeholders noted that the novel science funded by the Foundational programs is essential to maintaining our nation's edge in agricultural sciences. The critical importance of Foundational programs that permit individuals or small teams to focus their creativity on our most pressing agricultural problems was a prevailing theme mentioned repeatedly in the listening sessions, webinars, and written comments.
- Stakeholders also encouraged AFRI to be less prescriptive in their grant programs. They noted that narrowly targeted Challenge Areas and Foundation Programs exclude vital agricultural research, and that AFRI should emphasize Foundational agricultural research projects that foster a generation of new knowledge and provide valuable opportunities to train the next generation of scientists.
- *Plant Breeding and Genetic Resources*: Stakeholders emphasized the importance of maintaining and strengthening classical breeding programs in AFRI, including the development of breeding strategies that support crop production and forest tree breeding. A number of stakeholders requested that the classical breeding programs not have mandatory requirements nor place a priority on molecular biology and/or genomics research.
- AFRI was also encouraged to support research into diversified crop-livestock systems and their potential for sustained productivity and profitability.

NIFA Terms and Conditions for Awards (Updated May 2012)

http://www.nsf.gov/pubs/policydocs/rtc/agencyspecifics/nifa_512.pdf

- **Genetic Resources from Outside of U.S.** If this project will use genetic resources from outside the United States, it is strongly recommended that the Project Director (PD) seek information regarding any required prior informed consent from and benefit-sharing with the appropriate host country authorities. For further information, see "Information for U.S. Government Funded Researchers Collecting In Situ Genetic Resources Outside the United States," housed on the U.S. Department of State's web site at <http://2001-2009.state.gov/g/oes/rls/or/25962.htm>. Researchers must also obtain permits and follow USDA/APHIS importation regulations (http://www.aphis.usda.gov/import_export/index.shtml). Contact the Plant Exchange Office, ARS, USDA, <http://www.ars.usda.gov/AboutUs/AboutUs.htm?modecode=12-75-15-00> or the National Animal Germplasm Program, <http://www.ars.usda.gov/AboutUs/AboutUs.htm?modecode=54-02-05-03>, as appropriate for further guidance on archiving the collections.
- **Release or Distribution of Plant Germplasm.** If plant germplasm (including mutant populations, mapping populations, diversity panels for association analysis, transgenics, near isogenic lines, etc.) was developed and/or evaluated as part of a NIFA-funded-project, these resources should be available to other researchers for validation of published results or additional

research. Distribution of plant germplasm for commercial purposes may be limited by the producer of the germplasm. Whether these resources were created and/or evaluated inside or outside the US, researchers are strongly encouraged to deposit germplasm, transgenic plants, mutants, plant populations, etc. into the National Plant Germplasm System or Stock Center. NIFA encourages Project Directors to confer with the Crop Curators and Crop Germplasm Committees in the USDA National Plant Germplasm System (NPGS) (www.ars-grin.gov/npgs/index.html) regarding the desirability of depositing genetic stocks and experimental plant populations generated by NIFA funding in the NPGS genebanks.

Plant Feedstock Genomics for Bioenergy: A Joint Research Funding Opportunity Announcement USDA, DOE (2012 RFA)

Phenotyping plant germplasm collections and advanced breeding lines in public breeding programs of bioenergy crops (energy cane, *Miscanthus*, sorghum, switchgrass, *Populus*) to discover and deploy valuable alleles for bioenergy traits such as:

- biomass yield, quantity and quality of key metabolites (sugars, starches, lignocelluloses);
- adaptation to temperature extremes, drought (water use efficiency), salinity, and nitrogen use efficiency.

Applicants must ensure that **1)** relevant germplasm is available for distribution and use; **2)** standardized methods for high-throughput phenotyping are feasible or will need to be developed as part of the application; and **3)** phenotype data generated will be publicly available. In addition, if collections from the USDA National Plant Germplasm System (NPGS) are employed, ***before the proposal is submitted***, research applicants must confer and coordinate with the crop-specific curators in the USDA NPGS (<http://www.arsgrin.gov/npgs/index.html>) and appropriate public plant breeding programs and ensure that phenotype data generated will be entered and curated in the Germplasm Resource Information Network database (GRIN) and other public databases for breeders to use. ***Similarly, should new germplasm be generated through this project, arrangements for its conservation and distribution must also be included. The preceding curatorial arrangements must be documented by a letter of support from the curator. As appropriate, a budgeted plan to support the preceding curatorial arrangements must be included.***